## **Soil Drainage Class Flowchart**

This flowchart, developed by the Waverly, Iowa MLRA Project Office, evaluates the dominant color of the soil matrix and the color and amount of redoximorphic features. It is a proxy for the soil and hydrologic data that are required for applying official soil drainage class criteria, as defined in USDA Handbook 18, Soil Survey Manual, chapter 3. The criteria used by the Waverly office may or may not be a reliable means of predicting drainage classes in your soil survey area. However, the flowchart is a very useful template from which your own survey-specific criteria can tested.

Begin by looking at the dominant color of the matrix immediately below the Ap, A, or E horizons. If chroma >= 3If chroma = 2If  $chroma \le 1$ If redox 100-150 cm With or w/out redox If redox > 150 cmIf redox < 100 cmW/out redox With redox Redox are Redox-free No redox-Redox are >15%zone between <15%, free zone Well, Mod. Well 2.5Y, 5Y, 10YR, 2.5Y, SW. Excessive. Ap, A, or E (Typic) > 2 chroma  $\mathbf{or}$ & upper limit  $\geq 2$  chroma Excessive of redox Redox boundaries are Redox boundaries are sharp, indicating relict diffuse, indicating present-day features. features. Poor or Mod. Well SW. Poor Poor V. Poor (Oxyaquic)